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Environmental Protection Commission

2/15/2022

Ethan Vorhes

Documents to Consider: Iowa DNR Review

Floyd County Iowa was home to many of the state's hundreds of agricultural drainage wells. As a result of the concentration of ADW's Floyd County was home to several multi agency studies on the groundwater and the effects of ADW'S. At some point the Floyd County Board of Supervisors became involved in escorting Jack Riessen at IDNR and other unnamed persons from other agencies who toured the county looking at ADW outlets.

In 1999 Iowa DNR reclassified several ag drainage wells (ADW'S) in Floyd County as Improved Sinkholes "IS". Most of these requests came from county officials. The county engineer Leo Staudt was a supervisor and a landowner who made one request for what appears to be two wells. The county engineer Lyle Lartz also requested several ADW's to be reclassified as improved sinkholes.

On the 15th December 1998 Leo Staudt asked Iowa DNR to determine if the "Drainage District #2" (DD#2) outlet was an ADW as shown [HYPERLINK

"https://www.dropbox.com/home/DNR%20documents?preview=LeoRequestClassification+(3).j pg" \h] The inspection was part of a general tour of Floyd County, Iowa the summer of 1998. During this farm tour Floyd County supervisor Leo Staudt escorted Iowa DNR's Jack Riessen and various other unidentified persons into his field to look at a "similar outlet" (IA056700023).

It is clearly stated by Leo Staudt during this undated "site visit" that "we did not look at the one in the sketch, as we stood on the road as discussed it there". Several times Leo Staudt made it clear that the cistern was in disrepair as the district had plans to "repair it" and "fix it up" as shown in [HYPERLINK

"https://www.dropbox.com/home/DNR%20documents?preview=DD%232+Inspection.pdf" \h] and in [HYPERLINK

"https://www.dropbox.com/home/DNR%20documents?preview=DD%232Inspection2.jpg" \h] (IA056700043). Ultimately it was to going to be "costly to fix it up and then have to find another way to dispose of the water" This makes it clear that the site visit was not a determination inspection, but rather a general conversation about drainage wells nearly a quarter of a mile from the drainage outlet in question. Internally Jack admits to not preparing a site visit inspection form.

On 18^{th} of February the Iowa DNR determined that this site was an "IS" as seen in [HYPERLINK

"https://www.dropbox.com/home/DNR%20documents?preview=Reply+to+Leo+Staudt+Reclass ification.pdf" \h]. What criteria was used to determine the agricultural drainage system is an "IS" is unclear.

Iowa Code [HYPERLINK "https://www.legis.iowa.gov/docs/ACO/chapter/567.50.pdf" \h] (7) Application for permit to divert water into an aquifer related to the use of an agricultural drainage well. An applicant for a permit to divert water or any other material into an aquifer by means of an agricultural drainage well shall submit the following information. The locations of

the features as listed below shall be shown on a map drawn to scale submitted with the application.

- a. Location of the agricultural drainage well to at least the nearest quarter-quarter section, township and range.
 - b. Diameter and depth of the agricultural drainage well, if known.
- c. Description and ownership of the lands which are drained by the agricultural drainage well and the associated drainage system.
- d. Location of tiles which drain to the agricultural drainage well, if known, and the location of any existing surface water intakes.
- e. The location and description of any earthen storage structures, confinement feeding operations, or open feedlots within the agricultural drainage well area.
- f. Information regarding any known connections between the agricultural drainage well or its drainage system and wastewater disposal or storage systems such as septic tanks and the location of such connections.
- g. The nature and extent of any agreements between the well owner and adjacent landowners who have lands which are drained by the agricultural drainage well and associated tile drainage system.
- h. Any available information regarding the economic and physical feasibility of closing the agricultural drainage well.

The rule states that the required information needed to be obtained to a permit for diversion into an aquifer related to the use of an ag drainage well. This required information was never provided to the Iowa DNR in Leo Staudt's hand written request. If the information was provided

accurately, it would have been determined to be an ADW. As the man-made drainage system was dug and dumped a 20" tile into the cistern which then injected the water to a depth of 70 feet below the surface.

What is clear is that DD#2 outlet was made to accept and inject agricultural drainage.

The drainage system was created in 1915 and was verified to have a 24" tile plus another 4" tile entering the cistern during in a site inspection by an unknown inspector at un unspecified date as seen it ADW data form [HYPERLINK

"https://www.dropbox.com/home/DNR%20documents?preview=DD%232+Inspection.pdf" \h] which was filed at the Floyd County Courthouse

While the Department response focuses mainly on legislative intent of regulating ADW and the exclusion of sinkhole's it also touches on 567—51.3(455B). In [HYPERLINK "https://www.legis.iowa.gov/docs/ACO/chapter/567.51.pdf" \h] it's clear diverting water from a tile into a sinkhole needs a permit. In this case it was stated "If drainage water entering a sinkhole did not enter the sinkhole prior to the "improvements", this does not appear to be the case in above-described structures". The premises of creating a drainage district and installing a tile drainage system is to remove excess water that had infiltrated and would not naturally drain and removing it. Additional laterals have been added periodical throughout the existence of the drainage districts history. The water entering the drainage system would not have naturally entered the outlet and would have required a permit under 51.3. IAC

[HYPERLINK "https://www.legis.iowa.gov/docs/iac/chapter/567.50.pdf" \h] Application for permit to divert water into an aquifer not related to the use of an agricultural drainage well. An applicant for a permit to divert water or any other material from the surface into an aquifer not related to the use of an agricultural drainage well shall submit information showing that the requested diversion will not alter the quality of the aquifer. The septic system violations and the manure spills impacted groundwater quality and should have been assessed to protect groundwater quality and provided safe limits for separation distances. This rule was not considered when Iowa DNR justified not permitting this outlet.

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"https://www.dropbox.com/home/DNR%20documents?preview=Jeff+Vansteenburg+ADW+Comment.pdf" \h] In response to Jeremy Klatt's observations of the structure in Gary Gerhardt's field "I think once you have "improved" a sinkhole it is no longer a sinkhole but an ADW.

Bringing tile into the improved sinkhole 9 feet below the surface in a concrete cistern to me constitutes underground injection. What would EPA UIC program people call and improved sinkhole underground injection?". It is clear that Iowa DNR is seeing evidence that indicates this "injection well" is taking agricultural drainage.

As part of my own investigation, I viewed the official drainage records. In the [HYPERLINK "https://www.dropbox.com/home/DNR%20documents?preview=originalrecordexcavation.jpg" \h] it says "Second the parties agree to furnish all materials and perform all the work of

excavating and installing said drainage system". Another mention of the drainage system being excavated or dug. This historical document was formed prior to the construction of the drainage system an make no mention of a sinkhole, but proves it was dug and created to drain the lands of DD#2

[HYPERLINK "https://www.legis.iowa.gov/docs/ico/chapter/460.pdf" \h] Iowa Code defines an "Agricultural drainage well" means a vertical opening to an aquifer or permeable substratum which is constructed by any means including but not limited to drilling, driving, digging, boring, augering, jetting, washing, or coring, and which is capable of intercepting or receiving surface or subsurface drainage water from land directly or by a drainage system.

Jeremy's July 2008 inspection was the first know time the DNR actually visited the site and in [HYPERLINK]

"https://www.dropbox.com/home/DNR%20documents?preview=Andy+Asell+hesitant+conculsi on.pdf" \h] Andy Asell to Jack Riessen and Jeremy Klatt, he is quoted as saying "Jeremy and I had a conversation earlier and we hesitantly arrived at the same conclusion as Jack". Jeremy Klatt's initial description fits ADW definition. It was only with hesitation that they agreed with Jack's original determination. Jeremy Klatt and Andy Asell both knew this fit the ADW criteria, but choose not to dispute past findings.

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Following the inspection I located a letter from Jack Riessen, DNR, dated February 18, 1999 regarding the cistern we observed. This letter was addressed to Leo B. Staudt. In

the letter (attached), Jack indicates that the area is an "improved sinkhole" and not an agricultural drainage well and therefore a permit is not required.

Jeremy Klatt's July 2008 review did not constitute as a review of the classification, but instead a review if the DNR had jurisdiction that relied on Jack Riessen's previous determination.

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"https://www.dropbox.com/home/DNR%20documents?preview=Mike+Anderson+salient+points .pdf" \h] in this email Mike Anderson wrote on December 30th 2008.

Again, perhaps the most salient point here at least in my opinion, is that quite a few people have been to visit this site over the years now. The consensus was that this was/is an improved sinkhole, not an ADW. The responsible landowner asked for a final official determination from IDNR as the responsible regulatory agency, and received it. Mr. Vorhes' complaint at this juncture is that IDNR's (and by inference other agencies') opinions and decisions have been incorrect. While having some sympathy for his overall complaint/s, I do not find any reason or any evidence to over-rule any of the past decisions.

Mike Andeson's opinion seemed to make sense that there was a consensus at the department now that few people had visited the site. Another key point that Mike Anderson makes is that "The responsible landowner asked"

[HYPERLINK "https://www.legis.iowa.gov/docs/ACO/chapter/567.50.pdf" \h] *Application for diversion of water related to the use of an agricultural drainage well*. An application for the diversion of water and any other materials to an aquifer related to the use of an agricultural

drainage well shall be made on a form obtained from the department and be submitted by or on behalf of such owners, lessees, easement holders, or option holders of all lands within the agricultural drainage well area. If the agricultural drainage well is part of a legally organized drainage district, the drainage district shall be a joint applicant. Applications for permits for diversions related to the use of an agricultural drainage well that existed prior to February 18, 1998, shall be made by July 1, 1999, with the exception of agricultural drainage wells that must be closed to comply with the provisions of 1997 Iowa Acts, Senate File 473. An application will not have to be filed for wells in a designated agricultural drainage well area which must be closed by December 31, 1999. In addition, the department may grant up to a six-month delay in the application date for owners of agricultural drainage wells where it can be shown there is a reasonable expectation that the agricultural drainage well will be voluntarily closed by December 31, 1999.

It is notable that under [HYPERLINK

"https://www.legis.iowa.gov/docs/ACO/chapter/567.50.pdf" \h] a drainage district was to be a co applicant. In this case it DDQ#2 was always the ADW owner and this should have been a red flag for the Iowa DNR. The fact that a landowner was also a supervisor leads to some plausible explanation that DNR overlooked the fact this owner was not rightful owner and a sole applicant. It could have appeared he was an agent, but he was never listed as an agent and the Iowa DNR should have had a policy to eliminate these conflicts of interest.

The "IS" on Gary Gerhardt's farm was a registered "ADW" until Leo Staudt asked for the reclassification of outlet for the "DD#2" drainage system as "*The responsible landowner*". The

outlet of DD#2 belongs to a legally organized drainage district. Although Leo asked for the reclassification the DD#2 did not apply as a co-applicant. Furthermore, Leo Staudt never once showed up as an "Agent" for DD#2 on any "ADW" [HYPERLINK

"https://www.dropbox.com/home/DNR%20documents?preview=DD%232+Inspection.pdf" \h] or [HYPERLINK

"https://www.dropbox.com/home/DNR%20documents?preview=DocumentsReport-494+DD2+spreadsheet.pdf" \h] The county engineer office phone number was provided as a contact. Although the request came from Leo personally and not the county or DD#2

[HYPERLINK

"https://www.dropbox.com/home/DNR%20documents?preview=LeoTranscipt1024_1.jpg" \h] While under oath in Vorhes vs Floyd County Leo Staudt (page 588 line 7) testified about how he came to power when he "*inherited the job*" over what he describes as a "mutual drain tile". Leo Staudt goes on to state that the is no petition to establish a board of Trustees on (page 614 line 13) During the trial several landowners testified to procedures the district used for governing the district at that time.

[HYPERLINK "https://www.legis.iowa.gov/docs/ico/chapter/468.pdf" \h] I code lays out he requirements for operating and maintaining a drainage district. At the time of reclassification, the DD#2 governing board was the Floyd County Board of Supervisors (BOS). Although Leo Staudt was a county supervisor, the county maintained that they had no affiliation with DD#2.

[HYPERLINK "https://www.legis.iowa.gov/docs/ico/chapter/468.172.pdf" \h] **Drainage** record book.

The board shall provide a drainage record book, which shall be in the custody of the auditor, who shall keep a full and complete record therein of all proceedings relating to drainage districts, so arranged and indexed as to enable any proceedings relative to any particular district to be examined readily. In this case there are very few records that are filed with the auditor.

[HYPERLINK "https://www.legis.iowa.gov/docs/ico/chapter/468.173.pdf" \h] **Records belong** to district

All reports, maps, plats, profiles, field notes, and other documents pertaining to said matters, including all schedules, and memoranda relating to assessment of damages and benefits, shall belong to the district to which they relate, remain on file in the office of the county auditor, and be matters of permanent record of drainage proceedings.

Once again there are very few documents that have been recorded in the "Drainage record book" These records would clearly tell who the proper agent of DD#2 was and is.

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"https://www.legis.iowa.gov/DOCS/IACODE/2003SUPPLEMENT/468/530.html" \h] Report to auditor

Such trustees shall, from time to time, and with reasonable promptness, furnish the auditor of each county in which any part of said district is situated, with a correct report of their acts and proceedings, which report shall be signed by the chairperson and the clerk of the board and

shall be recorded by the auditor in the drainage record, and shall be published in one official paper in the county having a general circulation in the district.

If the drainage district was actually governed by a board of trustees, it would not excuse or explain the lack of documentation file with the auditor a stored in the drainage record book.

[HYPERLINK "http://www.legis.iowa.gov/docs/ico/chapter/468.501.pdf" \h] **Petition**A petition shall be filed in the office of the auditor signed by a majority of the persons including corporations owning land within the district assessed for benefits.

DD#2 landowners have also failed to file a petition signed by any landowners to take jurisdictional governance away from the Floyd County "BOS". The drainage record would establish whether or not the power of governance belongs to the county or to the board of trustees.

[HYPERLINK "https://www.legis.iowa.gov/docs/ico/chapter/468.29.pdf" \h] **Dissolution**When for a period of two years from and after the date of the establishment of a drainage district, or when an appeal is taken or litigation brought against said district within two years from the date such appeal or litigation is finally determined, no contract shall have been let or work done or drainage certificates or bonds issued for the construction of the improvements in such district, a petition may be filed in the office of the auditor, addressed to the board of supervisors, signed by a majority of the persons owning land in such district and who, in the aggregate, own sixty percent or more of all the land embraced in said district, setting forth the above facts and reciting that provision has been made by the petitioners for the payment of all costs and expenses incurred on account of such district. The board shall examine such petition at

its next meeting after the filing thereof, and if found to comply with the above requirements, shall dissolve and vacate said district by resolution entered upon its records, to become effective upon the payment of all the costs and expenses incurred in relation to said district. In case of such vacation and dissolution and upon payment of all costs as herein provided, the auditor shall note the same on the drainage record, showing the date when such dissolution became effective.

In the case DD#2 the district has not been dissolved as the drainage record indicates.

[HYPERLINK "http://www.legis.iowa.gov/docs/ico/chapter/468.502.pdf" \h] Election

The board, at the next regular, adjourned, or special session shall canvass the petition and if signed by the requisite number of landowners, it shall order an election to be held at some convenient place in the district not less than forty nor more than sixty days from the date of such order, for the election of three trustees of such district. It shall appoint from the freeholders of the district who reside in the county or counties, three judges and two clerks of election. It shall not be mandatory for the county commissioner of elections to conduct elections held pursuant to this subchapter, but they shall be conducted in accordance with the provisions of chapter 49 where not in conflict with this subchapter.

Leo Staudt was not elected by the members of DD#2 and he was not acting as a BOS or a registered agent of the ADW.

[HYPERLINK "https://www.legis.iowa.gov/docs/ico/chapter/468.518.pdf" \h] **Tenure of office**The trustees so elected shall hold office until the fourth Saturday in January next succeeding their election and until their successors are elected and qualify. On the third Saturday in the January next succeeding their original election, an election shall be held at which three trustees shall be

chosen, one for one year, one for two years, and one for three years, and each shall qualify and enter upon the duties of the office on the fourth Saturday of the same January. On the third Saturday in each succeeding January, an election shall be held to choose a successor to the trustee whose term is about to expire, and the term of the trustee's office shall be for three years and until a successor has qualified.

During the Trial Leo Staudt further explained his tenure as the head of the district as a multi decade ongoing role on (page 610) Vorhes vs. Floyd County. His testimony also explains DD#2 procedure as how meeting was noticed and conducted.

[HYPERLINK "https://www.legis.iowa.gov/docs/ico/chapter/468.45.pdf" \h] **Notice of hearing**1. The board shall fix a time for a hearing upon the report of the commissioners, and the auditor shall cause notice to be served upon each person whose name appears as owner, naming the person, and also upon the person or persons in actual occupancy of any tract of land without naming the person or persons, of the day and hour of such hearing.

- 2. The notice shall be for the same time and served in the same manner as is provided for the establishment of a drainage or levee district, including as provided in sections 468.14 through 468.18, and shall include all of the following:
- a. A statement of the amount of the assessment of costs and expenses of construction apportioned to each owner upon each forty-acre tract or less. However, the statement is not required to be published as required in section 468.15 if it is posted in the office of the county auditor and on the county's internet site. The county auditor shall provide a copy of the statement upon request. b. A statement that all objections to the report must be in writing and filed with the auditor at or before the time set for the hearing.

Notices were no served to persons owning land in the district

[HYPERLINK "https://www.legis.iowa.gov/docs/ico/chapter/468.507.pdf" \h] Notice of election

The board, or, if in more than one county, the boards acting jointly, shall cause notice of said election to be given, setting forth the time and place of holding the same and the hours when the polls will open and close. Such notice shall be published for two consecutive weeks in a newspaper in which the official proceedings of the board are published in the county, or if the district extends into more than one county, then in such newspaper of each county. The last of such publications shall not be less than ten days before the date of said election.

The landowners of the drainage district had one recorded election in the year 2009. This election was not noticed in a paper, but was word of mouth. The officers did not post bonds or organize. The tenure of office has not been followed as the board is the same as in 2009 13 years later. The county auditor has no records of any proceedings. These facts are documented as a public record and testimony from the alleged board of trustees and members of the district as well as county substantiate these claims. Therefore, if Leo Staudt wasn't an elected agent and the district wasn't a joint applicant under what authority did, he has to ask or apply for any permits with the Iowa DNR.

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"https://www.dropbox.com/home/DNR%20documents?preview=MDAllisonLetter.jpg" \h] On the 26th of November Gary Gerhardt received a letter from MD Allison an Attorney he had hired to investigate the governance of DD#2. He was informed "*the supervisors are not in any way*

involved with this district". Upon further investigation as to who the trustees where he was informed "that there are no trustees; that this is just a mutual drain tile". This letter further collaborates the story of an abuse of power and neglect on the county's behalf. It also demonstrates that Leo was no in anyway responsible for the drainage district or the rightful landowner.

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For many reasons the correct agent would have been a BOS member, but as a landowner Leo Staudt should have recused himself and another board member acted as the "Agent". So, to establish the "rightful landowner" some level of research would have to have been done to determine whether or not the person asking for clarity as whether a permit was necessary or not was indeed the rightful person. The ADW owner being a drainage district implies that a coapplicant would also be filed **HYPERLINK** have as in to "https://www.legis.iowa.gov/docs/iac/chapter/567.50.pdf" \h]

At some point in the county was involved as they were utilized the district to notify persons as seen in [HYPERLINK "https://www.dropbox.com/home/DNR%20documents?preview=Mailing+list+DD%232.jpg"
\h][HYPERLINK \l "2.jpg" \h] The also meet in the supervisor's office as seen here in [HYPERLINK "https://www.dropbox.com/home/DNR%20documents?preview=DD%232+notice+of+meeting.j pg" \h] To summarize the activity of DD#2 it used the county when it was convenient, but when legal issues arose, they maintained the county had no jurisdiction. Its notable that my aunt Jean Westendorf owns land in the district and was intentionally left off.

(NEED DOC)

On March 25th 2009 Jeremy Klatt returns to visit the site with EPA. Iowa DNR role was to inform the EPA on the background of the sinkhole. It is unclear what evidence the Iowa DNR possess at this time. The record was clear that Mr. Vorhes alleged that the "IS" was responsible for the hair falling off the cattle. It was also noted that again the Department did not review or receive any of the necessary information at the time to determine whether or not the structure met ADW definitions, but it was simple reiterated that "The Department concluded in 1999 that this structure was an improves sinkhole in 1999 and therefore was not subject to Iowa DNR rules. That position was restated to Mr. Vorhes in 2008".

Once again, the Iowa DNR is relying on a determination that was concluded by an informal site visit without an inspection memo or a written application from an Agent or legal representative. It is unclear still to this day whether the Iowa DNR possess any information as to the historical nature of the outlet or the current working condition as no actual investigation was ever launched.

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"https://www.dropbox.com/home/DNR%20documents?preview=DocumentsReport-328.pdf" \h] Robert Libra and the others at the Iowa DNR used the term Improved Sinkhole and describe it as something than does not resemble these outlets. "We have informally used the term to describe a sinkhole that has a pipe or culvert stuck down into it to keep it from clogging and taking water. I believe, but don't remember for sure, that such featurds didn't stay on the "the list" of registered ADW's if they were deemed an improved sink."

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| classify.pdf" \h] attachment that the letter was a quick cut and paste with no actual review that | | | | | | | |
| took place. It is unclear if there was any valid determination of Tom Brunner's outlet in question | | | | | | | |
| as well. | | | | | | | |

It was near this time that Leo Staudt asked Iowa DNR's Jack Riessen to approve the replacement of the old structure. In Vorhes vs Floyd County Leo Staudt testified when asked if the BOS considered hiring a consulting engineer as in Vorhes vs Floyd County

[HYPERLINK "https://www.dropbox.com/home/DNR%20documents?preview=Vorhes+Vol+II-

63+Leo+Staudt+Approval.pdf" \h]

"When we decided if we were going to build a structure, I called Jack Riessen again at the DNR, and I asked him if there would be any reason why we couldn't put a structure on the same place to replace that one? He says no, sir, he says -- I remember the situation because it was quite unique, and he says, it's my opinion you can go ahead and

replace this structure as it was. And I also went to the health office, and they also said that it was okay, and I went to the NRCS office, and they also approved it".

"Like I said, I got the okay from the DNR and I thought that probably would have been sufficient. Or we thought it should have been sufficient.

DD#2 never hired an engineer or a geologist to review the drainage. They did consult with the Iowa DNR, but no record of this appears in an of the DNR files for DD#2. No mention of this is in the emails as well.

As it pertains to the sewer complaints in during the second week of March 2011 during our trial, I visited with Jeff Sherman about the septic discharge entering the IS's. It was my notion at that time that nobody was going to deal with the issue. I called on August 1st 2011 and spoke with Claire Hruby about the sewage and other activities that were being injected into the groundwater. [HYPERLINK

 $"https://www.dropbox.com/home/DNR\%20 documents?preview=Sewage+Report.pdf" \ \ h \] \ I \\ addressed \ my \ concern \ of the lack \ of enforcement. \ Jeremy \ Klatt \ and \ Jeff \ Sherman \ did \ make \ a \ site \\ addressed \ my \ concern \ of the lack \ of enforcement. \ Jeremy \ Klatt \ and \ Jeff \ Sherman \ did \ make \ a \ site \\ addressed \ my \ concern \ of \ the \ lack \ of \ enforcement. \ Jeremy \ Klatt \ and \ Jeff \ Sherman \ did \ make \ a \ site \\ addressed \ my \ concern \ of \ the \ lack \ of \ enforcement. \ Jeremy \ Klatt \ and \ Jeff \ Sherman \ did \ make \ a \ site \\ addressed \ my \ concern \ of \ the \ lack \ of \ enforcement. \ Jeremy \ Klatt \ and \ Jeff \ Sherman \ did \ make \ a \ site \\ addressed \ my \ concern \ of \ the \ lack \ of \ enforcement.$

This prompted a notice to go out to the landowners [HYPERLINK

visit and found that there was septic discharge to the ditch.

"https://www.dropbox.com/home/DNR%20documents?preview=Septic+System+Violation+ltr+ 5-23-12_page-0001.jpg" \h] It was stated that "Jeremy Klatt and I visited the site and determined that there was in fact sewage discharging from the tile outlet". At that time, I felt that both Departments were clearly aware of the violations and action would be taken. After around five years of not seeing a single change, I visited Jeff Shermans office requesting to see if the

house I suspected had a registered sewer and I was informed it had not complied yet. This prompted yet another warning [HYPERLINK

"https://www.dropbox.com/home/DNR%20documents?preview=Septic+System+Violation+ltr+7-3-17_page-0001.jpg" \h] I spent several more years waiting to see changes to the sewer, although the surface intake that was discharging the tile was removed the septic discharging did not change. During the site visit Jeremy Klatt maintained that the district didn't need to change anything, and when pressed about the sewer he agreed they couldn't allow it to continue. This prompted the third warning after period of over ten years.[HYPERLINK "https://www.dropbox.com/home/DNR%20documents?preview=Septic+Violation+letter+7-3-

[HYPERLINK \h]

In 2009 EPA determined this was an "Injection Well" and stated they had intended to close it and after talking with the Iowa DNR they decided not to micromanage our state laws.

21 page-0001.jpg" \h] ultimately a sewer was finally implemented at the suspect residence.

[HYPERLINK

"https://www.dropbox.com/home/DNR%20documents?preview=Copy+of+Site+Visit+Report+a nd+Congressional+Correspondence+regarding+Vorhes+Site 19-06-2009.pdf" \h]

During the Early investigation by the Iowa DNR maintained that this was a simple sinkhole.

EPA said not so [HYPERLINK

"https://www.dropbox.com/home/DNR%20documents?preview=DocumentsReport-443+Epa+Class+five.pdf" \h] Kurt Hildebrandt to Mike Anderson that "Your summary of our

conversation back in July, while Iowa may not have any rules about sinkholes the EPA run UIC program does. Under the current list of Class 5 injection wells, we included "improved sinkholes" as a type of injection practice regulated by EPA". Further stating that "The bottom line is that EPA may be compelled by our rules to do something about the sinkhole".

At the same time Mike Anderson is quoted as saying [HYPERLINK "https://www.dropbox.com/home/DNR%20documents?preview=DocumentsReport-443+Epa+Class+five.pdf" \h]

I think Mr. Vorhes is frustrated that county, State, and NRCS folks have all classified this as a sinkhole. However, and I know this comes across as bureaucratic, but our rules are our rules. We have *no* authority, at least from the ADW and overall water allocation rules, to intervene. It's not that "we want nothing to do with this case", it's that we've investigated it quite thoroughly (imho) and he doesn't agree with past and present IDNR response.

IDALS and NRCS does not do determinations I have confirmed this with both Staffs. Although it sounds more official, but the truth was that the Iowa DNR has had authority and seriously failed to do it job with regards to investigating because they didn't want to admit they were wrong.

[HYPERLINK

"https://www.dropbox.com/home/DNR%20documents?preview=NRCS+determination+letter.pd f" \h] I recently inquired to get NRCS copies of any and all documents as they pertain to the DD#2 and the improved sinkhole in question and was told that NRCS does not make those determinations

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"https://www.dropbox.com/home/DNR%20documents?preview=DocumentsReport-441+Mike+Andeson+Improvement.pdf" \h]

Sounds good - based on conversations with Jeremy Klatt with our field office, it sounds like there was an explicit modification (a pipe coming in) but what that means as far as "improvement" I cannot say. From our standpoint, we evaluated that a lot in 98-99 (our legal staff took a long look at it and opined that we had no authority over sinkholes, but that was based on Iowa legislative action/intent, not examination of the Class V regulations. Every communication we've had has tried to emphasize that EPA has regulatory oversight under Federal law. Sure can't hurt to have someone from your shop take a look......

Mike Anderson didn't seem to know what modification existed, but felt that it was thoroughly investigated. Iowa DNR did make it clear it was up to the EPA to regulate and promulgate rules specific to "Improved Sinkholes", [HYPERLINK

"https://www.dropbox.com/home/DNR%20documents?preview=class_v_volume1_execsumm-16-17.pdf" \h] but EPA classifies improved sinkholes that take ag drainage an ADW. Further EPA ADW dialog continues in Vol 1 of EPA's class five summary [HYPERLINK

"https://www.dropbox.com/home/DNR%20documents?preview=class_v_volume1_execsumm-29-31.pdf" \h] Therefor developing rules for a handful of mislabeled ADW's. As previously seen EPA choose to act and the Iowa DNR talked them out of it. Why?

[HYPERLINK "https://www.epa.gov/sites/default/files/2015-07/documents/class v volume1 execsumm.pdf" \h]

[HYPERLINK "https://www.epa.gov/sites/default/files/2015-07/documents/2007_12_12_uic_class5_study_uic-class5_classvstudy_volume02-

In the summary of the control study specific to ADW (Vol 2), it states "some ADWs are in fact nothing more than improved sinkholes in areas with karst".

The introduction to Volume 2 it goes a little further to say

agriculturaldrainage.pdf" \h]

In order to qualify as an ADW, a system must have a "well." As currently defined in the UIC regulations (40 CFR 144.3), a "well means a bored, drilled or driven shaft, or a dug hole, whose depth is greater than the largest surface dimension." Therefore, any hole that is deeper than it is wide qualifies as a well. This includes relatively sophisticated designs in which holes are drilled and cased with metal or plastic pipe. However, it also includes simple systems designed to drain fluids to the subsurface. For example, an improved sinkhole, defined as a surface depression altered to direct fluids into the opening (USEPA, 1987), qualifies as an injection well, as does an abandoned drinking water well that has been adapted to convey fluids to the subsurface. If improved sinkholes or abandoned drinking water wells accept surface and/or subsurface drainage from agricultural activities, they qualify as ADWs

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It is clear from reading any EPA document that an Improved Sinkhole that takes ag drainage is

an ADW. There is no class of "Improved Sinkhole" because it is a term given a modified natural

geological feature not a class of wells.

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"When we visited the site, we noted the sink hole but not any improvements to it. Has there been

a change to the configuration? If there have been modifications to enhance the drainage entering

the sink hole, then it is possible that EPA via the UIC program may have to address the situation.

Give the a call and we can talk further".

I spent many years trying to explain this and did explain that there had been modification and it

did qualify as an ADW. The cistern was the modification and the tile was there. I believe the

blowout and gully it created was portrayed as a sinkhole during the site visit by IDNR

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This is in response to your questions regarding the drainage that affects your property. DNR staff have visited the site and the drainage structure in question several times, and EPA and NRCS staff have been there as well. The conclusion that all have reached is that the structure involved is an improved sinkhole, and not an agricultural drainage well (Class V Injection well in EPA terminology).

The department has no reason to change that regulatory determination, and has no authority over this type of drainage system. Note that if the structure in question was an ag-drainage well, the owner would be required to obtain a permit, but would not be required to close it or provide an alternate outlet. The drainage situation questions appear to be between you and the owner of the property the sinkhole and structure are on. Hopefully you can find resolution to the problems.

This letter is one of the last for many years. It shows the ongoing denial of the facts and the that DNR had been their multiple times so they did not need to review it anymore. This thread shows I has talked with several people at the Iowa DNR and continued to explain what they were missing. Instead of meeting with me and actually reviewing my new documentation which was 7 years old at this point, they stick to the old EPA determined it was not an injection well and it is between me and Mr. Gerhardt. Another lie or misrepresentation is that this outlet is permittable. Iowa code would consider this a designated drainage area since it has as CAFO and an anerobic lagoon immediately above the outlet. This outlet was never permittable due to that fact, and shows legislative intent to protect groundwater from this type of pollution.

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"https://www.dropbox.com/home/DNR%20documents?preview=DocumentsReport-277+Innapproriate+drainage.pdf" \h] When I reached out to the Iowa DNR a year ago, they reached out to Keith Schilling at the University of Iowa. He told them after looking at it briefly that. "I would agree with the previous assessment that it is likely a sinkhole that is being used inappropriately for ag drainage".

The fact that this outlet is in a large depression in not indicative of the origin of the outlet. The location of the cistern within the depression would indicate that the builders set it off to the side of the depression where the stone was not fractured. This was done to allow the drainage water to collect and the cistern to maintain its integrity.

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"I think I still have a hard copy of how the originals decision was made in 1988".

Claire's response

So do I understand this correctly, as an improved sinkhole, this opening is still classified as a Class V injection well and subject to SDWA rules? Although this opening is not located in the capture zone of a public water supply well, this opening is injecting water into an aquifer used extensively in this area. Shouldn't injection of tile water, which contains water drained from upstream manure storage and application areas be closed? I am guessing that at the time of this determination, the UIW rules may not have required specific action with regard to this class of "well," but has that changed? By preventing "silting in" as your letter states, this "improvement" keeps the sinkhole open and draining faster than it would if it were allowed to erode/silt in naturally. It also prevents any

natural filtration of any contaminants prior to entering the aquifer. This brings me back to the definition of an ag drainage well. If it is being kept open artificially, then doesn't it meet the definition of "man-made"? Last question for now: Are there any other examples of "improved" sinkholes that allow this type of drainage in the state? If this is the only one, or one of a few, shouldn't we still find a way to encourage closure regardless of the classification? I hope you know that I am not questioning this judgement from decades ago, I am just trying to figure out how best to protect groundwater now. Many thanks for your patience!

Mike Anderson reply says that there are only 5 or 6 improved sinkholes like this and that "The indications I have had from the EPA Class V folks (Kurt Hildebrandt and Ben Messner) was that they agreed with/would not supersede the Iowa DNR interpretation". He goes on to say "I'm not sure how coherent an opinion I have on the whole "manmade" vs "improved by man" debate".

His response indicates these fits in a general sinkhole class

"From our programs's standpoint, any suggestion that we move toward regulating sinkholes has always been met with the counterpoint that this had no funding and that the legislature, which had specially addressed IDNR (and IDALS) authority over ADWS, had specifically not included sinkholes."

Clarie's response is

"Thanks Mike. I agree that we probably cannot go down the path of filling sinkholes, but in this case, the sinkhole is being artificially kept open preventing natural siltation and erosion, and preventing any possibility of natural filtration of contamination."

Mike Anderson seems to not know about 51.3 or actually seen the evidence or doesn't care

"I don't know enough about the CAFO/manure management program to really comment on whether a fine is warranted or not. I don't think there is any authority that the program I work in (water allocation and the specific IAC stuff about ADWS) can utilize to intervene in this matter. As far as the UIC issues, EPA does have primacy for this in Iowa, but has chosen not to intervene several times already"

As I showed earlier EPA was going to regulate this outlet until Iowa DNR convinced them not to. The thread continues to try and bring clarity to an actual reevaluation. Claire ask

Mark and Mike, Thanks for taking the time to indulge my questions on this late Friday afternoon! I am happy to divert questions about drainage law and AFOs to others. And I will pass Underground Injection Well questions to EPA. The two questions that I need definite answers from you two and your private well folks are the following:

- 1) whether there is any possibility that you would consider re-evaluating any "improved" sinkholes as to whether or not they fit the ag drainage well criteria with the consideration that they may not function the same way that a natural sinkhole would function? If not, do we have clearly outlined justification for how installation of a concrete structure that channels drainage and prevents siltation, and possibly blasting, do not fit the criteria for manmade development of an ag drainage well?
- 2) based on our understanding of the geology and past well water quality records, do we have specific recommendations regarding Ethan Vorhes' private well? or do we specifically request additional testing be done via Grants-to-Counties?

Claire Hruby continues to question the well and looking for answers.

"I found this citation regarding Class V wells:

https://www.law.cornell.edu/cfr/text/40/144.12 This says that the injection well would

require a permit or closure if EPA's Regional Administrator is notified that the well could be causing a violation of any primary drinking water regulation. Does this mean that it would only apply if this injection well was impacting a public water supply which is subject to primary drinking water standards, or does this apply if it is suspected of causing any drinking water to violate the standard?"

It should be clear that the surface water is polluted that is being injected, the question becomes is does the aquifer need to become unpotable before we do something?

When Mark Anderson chimes in on this thread again to answer Claire question he says

"That question (addressing violation of primary drinking water standards specifically has to be addressed to EPA Region VII rather than us or our legal folks. They have authority/primacy for Class V in Iowa. The traditional understanding is that it has to be directly affecting an "underground source of drinking water", hence the ambiguity.

Conversations over the years lead me to say that their interpretation is it has to be a direct source. That would explain EPA's various decisions over the years not to "intervene" in this. Their last on-site inspection of the site was in 2008-2009 and once again they declined to get involved"

Mike Andeson has been the primary contact with the EPA and clearly the one who convinced them not to act. The fact that the choose not to supersede our states interpretation, then we point the finger back seems disingenuous. This is a point source pollution issue. The drainage system directly injects polluted drainage water into the aquifer. He goes on to clarify his stance on reevaluating the situation.

"I do not want to come across as grouchy or dismissive of the issues that you raised. I apologize if I do so. But after having evaluated this several times over

the course of my career (including two mandated by management site visits and extensive consultation with the field office folks over the years), the answer is no. Absent any direction from our higher management to do otherwise, the possibility that ... I "would consider re-evaluating any "improved" sinkholes as to whether or not they fit the ag drainage well criteria" is quite small, as those decisions were made and I fail to see any particular reason to revisit the issue yet again.

Asserting that the decion/s made on these was incorrect (or possibly incorrect given the ambiguity) is fine. But I really would need to see a lot stronger reasons that this should be changed."

Mike Anderson is clearly stuck on the idea that since this was decided that it should just be over. It is still unclear as to what evidence he has ever seen. It is also clear that no real action other than looking at the original response to Leo no action to determine this outlet's proper classification was taken. Claire was clearly trying to be thorough and was looking for all the evidence as see in her response.

"Thanks Mike. This is very clear. My goal is to write this up in as much detail as possible, so that the next person "randomly" assigned to review this site doesn't have to start by reviewing email strings and a pile of paper records. When my report is complete, I will share it with everyone and make edits as necessary. Absolutely no rush, but if there are photos in the file of the improved sinkhole and any records regarding its "construction," please share those with me. If you simply want to dump your file on my desk at Wallace, I will do the scanning myself if it is too much trouble."

The rest of the thread is about well replacement and we would love to do this, but the ongoing damages cause by DD#2 have made the it next to impossible.

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"Private Well Program gives the following course of actions for proper environmental review and impact to local aquifer:

Action #1 - Determine Aquifer impact to wells:

- 1) Drainage Water Testing at the improved sinkhole 'IS' surface injection point. Seasonally.

 (Ambient groundwater)
- 2) Well Testing (Floyd County Public Health FCPH) noting Vorhes and other nearby wells are shallow and are drawing water from the upper Limestone formation that is receiving recharge from the "improved sinkhole".
- a. Water Quality Well Test seasonally by FCPH Vorhes and all nearby wells for N03,

 Pesticides and Herbicides. Seasonal testing allot for natural migration and attenuation of

 nutrients and other ag chemicals with funding assistance from Grants to Counties (GTC).

 b. FCPH to provide a more in-depth sampling of well sampling and well refurbishing of the

 Vorhes well with funding assistance from Grants to Counties mirror UHL study for pesticides,

 herbicides.
- c. Video Vorhes Well for proper construction. If the well does not meet the current Private Well Construction Standards IAC 567 Chapter 49, recommend Vorhes to reconstruct the well to meet current Chapter 49 Rules for well construction, including: relocating to Vorhes Private Well to meet proper setback distances to feedlot, septic, and onsite UST; and extend casing of

well below shale layer(s) at approximately 250 feet total depth. FCPH to provide assistance with well rehabilitation funding through GTC.

d. Collective collaborative assistance with Floyd County Soil and Conservation District, Ag

Drainage District, and FCPH with a full surficial hydrologic report of upper watershed

determining flow dynamics by gauging current flow capacity of the drainage system and how

much flow is diverted to the 'IS'.

Action #2 - Closure If water quality data determines contamination impact to aquifer:

- 1) Closure of the 'IS' in accordance with USDW aquifer protection criteria, with full depth neat cement grout.
- 2) Full hydrogeological interpretation of impact of closed ag drainage wells and opening of new sinkholes within a 2-mile radius within the last 10 years.
- 3) Hydrologic review of upgradient contributors (drainage acres tiled) due to the fact that nearby ADW's have been closed. In order to properly size and divert flow to alternate existing waterway (south) of Vorhes.

The suggestions of the private well group are spot on what I've been hoping for a long time. The idea that farm drainage that meets no ag drainage well permitting conditions would be safe to inject into an aquifer ridiculous idea. Watching the water entering the ADW you can see the contamination let alone need to send it to a lab to be tested.

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"https://www.dropbox.com/home/DNR%20documents?preview=DocumentsReport-

191+Claire+Clarity+Thread.pdf" \h] This thread is another point where the Iowa DNR actual looks into the situation and deflection starts happening. Claire says

Hi guys, Are either of you able to find a copy of EPA's 2009 determination that the improved sinkhole that Ethan Vorhes has complained about is not a Class V Injection Well?? Everything that I read on EPA's websites specifically includes improved sinkholes that drain agricultural landscapes as being Class V, so I really need to understand EPA's justification. Many thanks!!

Mike Anderson is always deflecting from giving straight answers he was the one on the phone with EPA

That has come up a coupla times in the past, as our files are kind of vague on that. I believe you will have to ask Mary Mindrup at EPA-7 for their file notes. It is unclear if they ever released a formal declaration under EPA letterhead. Our files don't contain this. They specifically declined to intervene after sending an inspector to look at the site.

Possibly, but i have a coupl've reservations here. This was the exact language we used in potentially deferring to EPA's authority when the case game up in the 1990's. "Although the agricultural drainage well rules do not apply, you should be aware that improved sinkholes are considered an injection well under the Environmental Protection Agency's Underground Injection Control Program. At present the EPA has not promulgated specific rules for this class of injection wells, other than to require registration." The Department basically very specifically declined to apply for primacy for Class V well regulation/UIC in the 1980s . So in ambiguous cases like the Vorhes one, we include caveats like the one I quoted. Especially when EPA specifically sent an inspector on-site.

I think on an older case like this, we as a Department might need to discuss how we would frame such a request. E.g., is this just an informal information request? Or are we as a Department officially reopening the case? And if we are, what authority are we claiming in order to do so? Given my history on this one, I guess I am willing to call EPA but would like to know/be clearer about the legal basis of what we are proposing doing. I don't mean to sound excessively bureaucratic, but this does concern me.

Mike Anderson is concerned with his collages asking for clarity from the EPA. EPA has been allowing Iowa to manage its own program and told Iowa several times this is regulated by EPA. Claire apparently starts to understand that involvement Mike Anderson as she says

Mike, I understand your hesitancy, but from my perspective this isn't just an old case, this is a new case. It was a new case in 2008/9 and it is a new case now. If we don't address all of the questions, then we are liable. Right? Here is my cross-section of the aquifer.

Closing one sinkhole isn't going to fix the problem, but folks are drinking contaminated water and we need to take whatever steps we have jurisdiction to take.

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"Mike, I am clear why the ag drainage rules didn't apply, but it seems like we still have some jurisdiction under Ch 51. Am I missing something? 567—51.3(455B) Diversion from surface into aquifer. A permit is required for diversion of water or any other material from the surface directly into any aquifer, including diversion by means of an agricultural drainage well. Diversion by tile or ditch into a sinkhole or quarry excavated in carbonate rock is presumed to be a diversion from the surface directly into an aquifer

in the absence of convincing evidence to the contrary. 567—51.4(455B) Drain tile lines. Water in drain tile lines shall be considered surface water."

Mike Anderson's reply he put's responsibility on someone else, and uses the key word likely. DD#2 discharge is point source pollution. You can literately see contamination going into a specific outlet and it can be eliminated.

"While I wasn't the one making these rules or interpreting them back in the late 1980s, I think thinking was along the lines that "drainage not specifically considered an ADW" would not be required to get a permit since it was "non-point" and likely below the program's regulatory threshold of 25,000 gallons of water per day."

Claire Hruby spells out that the outlet takes enough water to qualify for a permit.

By my calculations there could be quite a bit more than 25,000 gallons per day through the tile.

Jeremy Klatt does not even know the applicable rules.

"That's interesting - I honestly didn't know that rule existed. Are the Vorhes' in their recent contact with the Director's office stating that there are surface intakes in the drainage area?" Jeremy Klatt circles back and tries to clarify the logic at which the Iowa DNR came to the conclusion. What Jeremy knows but doesn't want to admit is this is an ADW so he deflects to Mike Anderson.

"Just wanted to circle back to this 51.3 business.....Jack in his letter to Leo Staudt in 1999 does refer to Rule 567 IAC 51.3 (455B). He indicated in the letter that..... "if the

drainage water entering a sinkhole did not enter the sinkhole prior to "improvements", a permit would be required under this rule, but this does not appear to be the case for the above-described structures" What I picture he means in that sentence, is that if the water was running into the sinkhole anyway, you wouldn't need a permit for that, because it was a natural occurrence. No permit needed even if you put a concrete box on the sinkhole to keep it open in this scenario. Which makes sense to me. But at the time of this letter, there was, I assume, tile plumbed into that concrete box. I'm not following the logic that the tile water that was plumbed into the cistern would have been entering the sinkhole prior to the improvements. Because, of course, prior to the tile, some of the water would have run off to the sinkhole, but some would have infiltrated. Mike you have any thoughts on what Jack was thinking back in 1999"

Mike Anderson concludes this thread by deflecting and from this logic it makes sense, but he skips right over the conversation about the farm tiles delivering ag drainage that otherwise wouldn't get to the sinkhole, hence the ag drainage system maybe he didn't know.

That makes sense. e.g., So if the water was running into the sinkhole anyway, you wouldn't need a permit for that, because it was a natural occurrence. No permit needed even if you put a concrete box on the sinkhole to keep it open. My recollection from that time long ago was that was precisely what he was thinking.

It is hard to say this was ever inspected when no information was given with the request when they stood on the road and talked about it and then the Iowa DNR sends out someone who doesn't know the environmental laws to review the case. The one person most qualified agrees that this is a ADW which is Clair Hruby. I have pointed this out repeatedly to Iowa DNR staff

and yet all I get is sorry can't help letters. The county repaired the old structure to keep surface water out, so if the cistern is to keep water from surface water from running into the well how is it the cisterns job to keep the sinkhole open so the surface water gets in at the same time.

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"I skimmed over Claire's detailed report. I think it probably needs some vetting by all appropriate DNR people, programs, legal, and EPA. I just talked to my private well program....I admitted to them that I was surprised that our private well program section of the report was not run by me and that it was the first I saw of it. They thought this report was going to be vetted...and maybe that is still the intent."

Amie Davidson found the hiccup too. Verbally Iowa DNR has convinced them to look the other way or to "take a back seat". My 2009 email from the EPA captures this fact well. It seems that Iowa DNR has convinced the EPA that this well didn't fit ADW criteria when it has always.

"I also received Claire's 40 page document and am starting to review that. I have an overall question though. The attachment Mark sent from EPA states that it is a UIC well, however verbally they state that it isn't. Did I miss something in the written document?"

Mark Moeller also sees the missing link but as long as nothing changed EPA won't regulate.

Although most sinkholes don't cause a tile system to be pressurized and create unnatural runoff.

The type of thing that can cause high amounts of chemical runoff as in this case.

"I had the same exact question. When I talked with EPA first yesterday, the entire discussion was they don't regulate this sinkhole because it doesn't meet the criteria to be a UIC well. BUT then I read the 2009 EPA Memo it wasn't crystal clear.

So then I called Ben Meissner with EPA back to clarify. He kind of agreed that the memo wasn't exactly clear, but he verbally confirmed that they are not regulating it as a UIC well and that they probably will not unless something has changed for it to meet the criteria. He said even if this hole were to be closed, there are many more sinkholes in the area basically doing the same thing."

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"Please forgive how long this has taken me to write up. I thought that I would simply be summarizing our meeting from way back in March, but I wanted to make sure that all of the applicable documents were put together in one place. As I did so, some big questions popped up, like "What is an improved sinkhole?" I found the definition in EPA's documentation regarding Class V injection wells. As I dug further, I realized that we did not have any final documentation from EPA and that their rules on Class V injection wells should apply. I also needed some clarification regarding our Water Supply rules, which cover diversion of tile water into a sinkhole (51.3) separately from the ag drainage well rules. Deb and Erik reviewed Mr. Vorhes' well independently, and I have included their review in the Appendix"

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"Thanks Claire, Looks like a messed-up situation going all the way back to Jack's initial determination. I would agree that the contaminated wells are not due to just the one ADW but to the whole karst setting and the fact that it is almost all crop ground in the area. Of course, having the ADW makes the groundwater situation worse but I'm not sure

that closing it would improve the water quality in Mr. Vorhes' well. Since the "improved sinkhole" is actually mapped as an ADW, do you really think it should be in the sinkhole coverage as well? Since the 1930s photos show that it was already accepting a 20" tile and had a silt box it would be difficult to classify it as a sinkhole and not an ADW, unless it really was an "improved" sinkhole, but we have no evidence of that from photography"

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"https://www.dropbox.com/home/DNR%20documents?preview=DocumentsReport-115+jeremy+report.pdf" \h] In Jeremy Klatt's report he did report the complaints, but still didn't do any investigation. Jeremy's report did address the point that no attempt to inspect the drainage system to determine the geological origin was made. The deer point was made to the DNR a long time ago which yielded more harassment, but none of these records were provided.

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"I don't know which way the burden of proof works in these cases, but based on my geologic expertise, it is logical to conclude that this site meets the definition of an ag drainage well and should not be treated as drainage that enters a sinkhole. In my professional opinion, a serious attempt to excavate and close the well below this concrete structure should be made"

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- 1) My first impression is that the situation is sure Ambiguous, and your conclusions certainly have validity/are plausible
- .2) Sinkholes certainly could have formed from the dissolution of the thin "salt: layers. Not sure if there is any way to form a conclusion, short of excavating
- .3) Authority to order excavating, follow-up on the burden of proof is also something I am not sure of DNR has taken the position that they will await an EPA conclusion. I can live with that.
- 4) Not quite sure where I am with your conclusion (that it is an ADW). As an extremely accomplished geologist, I think you have the right to put it forth, especially as a recommendation. My default thought is that it stays as a sinkhole, but that is more of a regulatory conclusion than a geological one. From a regulatory standpoint, what EPA concludes may push this one way or the other.
- 5) As far as personal thoughts/advice, I would put this forth as you wrote it. You were asked to examine the area and make a conclusion. It is hardly the first time that conclusions differed from previous policy decisions or were/are "all over the map". As far as final resolution, I would sure like to see what might be under that sinkhole, but that might be the only way to definitively rule on this.
- *6) We will have to see what EPA says.*
- 7) From there, we will have to see what our legal folks think. Burden of proof will be a complicated legal issue if we re-classify this

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"https://www.dropbox.com/home/Dnr%20files/DNR%20PDF?preview=DocumentsReport-86+Original+Record.pdf" \h] This is an email I sent to try and show some of the evidence the

DNR doesn't want to find. I point out the records, the drainage problems with the DD#2 governance. The original document indicates this is a ADW

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"https://www.dropbox.com/home/Dnr%20files/DNR%20PDF?preview=DocumentsReport-77+No+reply.pdf" \h] I once again sent an email trying to get some validation and documents. I have never seen any evidence that this was a "IS". I also have requested an in person meeting to clarify my concerns as to the difference and the fact that the department has not considered the new information.

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"https://www.dropbox.com/home/Dnr%20files/DNR%20PDF?preview=DocumentsReport-61+Noah+reclass+letter.pdf" \h] Once again, I had sent another email looking for some evidence. The evidence had never been supplied and still hasn't. The burden of proof in this case has never been met in my opinion. I never receive any proof stronger than the evidence I documented and I can irrefutably prove without a doubt this structure was always and ADW.

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"https://www.dropbox.com/home/Dnr%20files/DNR%20PDF?preview=DocumentsReport-54+County+reports.pdf" \h] Once again, I had collected new evidence by asking the county. The attachments were related to the IS in the road ditch, the original inspections mention ag drainage and being dug which two of the criteria requirements to meet an ADW. I pointed this out, but the Iowa DNR has settled on not reviewing that well all together. It seems that all the investigation

has pertained to the Gerhardt well. I also pointed out the discrepancy in the reclassification request and response as to the information in the letter. The response to the county was a quick cut and paste from a previous letter with a similar situation. It looks formal, but it makes a person question if any real reviews happened in these other cases as well.

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"https://www.dropbox.com/home/Dnr%20files/DNR%20PDF?preview=Gerhard+Farm+UIC+Fi nal+Inspection+Report.pdf" \h] This is the EPA site visit Final Report. This document concludes by saying that

"The EPA recommends that the Modified Sinkhole/Injection Well be registered as an ADW by Iowa DNR and closed".

"EPA continues to recommend that alternative drainage be constructed on Mr. Gerhardt's Farm".

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"https://www.dropbox.com/home/Dnr%20files/DNR%20PDF?preview=Gehhard+Farm+Clarific ation+Letter.pdf" \h] This email from the EPA was to classify this is an ADW and that these were recommendation not requirements.

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"https://www.dropbox.com/home/Dnr%20files/DNR%20PDF?preview=DocumentsReport-66+Chad+Fields+Reveiw.pdf" \h] Chad Fields was asked to review Claire's ADW determination. It is unclear what evidence Chad Field used. If he made a trip to the site and lifted

the lid it may have been more plausible that this was an investigation he did and his finding should be considered. The videos and pictures that I have would be clear evidence of an ADW had any of the people actually looked. He mentions NRCS approval which NRCS did not make a site visit and doesn't make those determinations. [HYPERLINK "https://www.dropbox.com/home/DNR%20documents?preview=NRCS+determination+letter.pd

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"https://www.dropbox.com/home/Dnr%20files/DNR%20PDF?preview=DocumentsReport-51+Sinkhole+letter.pdf" \h] This letter is the high point of Iowa DNR denial. It is clear that the DNR compartmentalized the information at this point. When Claire Hruby indicated this site was an ADW the Iowa DNR gave unidentified information to Chad Fields. Although he clearly did review some of what Claire Hruby complied. It is obvious that the DNR made this determination without returning to inspect the bedrock in the structure or viewing the pictures and videos that I have insisted are the real evidence. Meeting in the literal field does not allow for this inspection of historical photos and would have done simply by allowing me a visit with a qualified geologist in an office.

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"https://www.dropbox.com/home/Dnr%20files/DNR%20PDF?preview=DocumentsReport-36+Noah+Recap.pdf" \h] In response to the Iowa DNR determination, I wrote a letter as a phone call follow up pointing out that it was disingenuous to not meet me and look at the videos and picture that serve as the real proof. I have been puzzled why no permit was required under 51.3.

The justification came from the court case as the court maintained the flow from the tile didn't change the flow of water. This fact was testified to the opposite in court and doesn't explain the lack of regulation for the decade before. In the earlier records Mike Anderson uses the term "likely below the regulatory threshold". This shows textbook deflection and lack of actual investigation.

[HYPERLINK

"https://www.dropbox.com/home/Dnr%20files/DNR%20PDF?preview=DocumentsReport-60+State+Fair.pdf" \h] This email shows that once the EPA wasn't going to do anything they were free to deny until they die. The DNR know about publicity and the county's denial of responsibility. I believe the start has been worried about the potential ramifications of a lawsuit if they admit they were wrong.

[HYPERLINK

"https://www.dropbox.com/home/DNR%20documents?preview=Improved+Sinkholes_24-02-2016.pdf" \h] This email highlights one important fact that it hard to prove. The Iowa DNR has withheld emails that were not only relevant, but contained crucial evidence that proves that they compartmentalized. These are videos surely weren't circulated. This email amongst several others shared in this document should have been provided with the emails provided in records request. I have a copy from my email which shows the clear and deliberate effort to which many at the Iowa DNR have engaged in.

I know that I have to much evidence to fit into one document. I like to prove that what I say is indeed the truth. I hope that what I have shown warrants further investigation. I have requested done a records search with IDALS and the EPA similar to the NRCS and all the agencies have told me they do not have any records of determining these outlets. I was hoping for a letter from IDALS before I sent this out, and I'm waiting on a full set of records from EPA as I already have their ADW evaluation and attached it.

I wanted to touch on the records for ADW 94 and 95. I have inquired into the ADW closure at the county public health, the auditor's office, and the engineers and the records don't reflect what is reported. No alternative drainage was implemented the water still enters the ground where the well was reported as being located. The well plugging records are not with public health or in the Drainage record book for the district. Threre is no official verification by the Department for the district. Similarly, Drainage District 27 outlet was reclassified as a "IS" and didn't supply documents necessary. The Tom Brunner request was by a private individual and has no verification by any official I can see. Several well have been marked as closed without proof or verification dates and/ or signatures. How many people in Iowa have were allowed to self-report closure or make geological determinations?

I have focused heavily on the documents that show the inner workings of the Iowa DNR staff that worked on this case primarily as it pertains to classification of these wells. What I have not done is tell the story of how I was harassed for a decade by wildlife officials. I am currently requesting emails and more evidence from the Iowa DNR that will show that Conservation officers repeatedly crossed the lines. I have recently disclosed that I had been approached by a

witness who watched another person make a false tip of poaching against myself. This tip was made by an individual who was jealous that I shot a trophy deer. This individual father let DNR officers hunt his land and they frequently seen the deer that I shot. These individuals ate lunch with the DNR officers many days of the week in my home town of Marble Rock at the Rock Tap.

One of these officers Steve Schutte attacked me one day in a traffic stop. He had become obsessed with my family as my dad had proved he lied under oath in court a few years before that to give me a ticket for driving of my school route. This particular situation was a dangerous one as he hit me and tried pulling me out the window off our truck. The truck was a stick and was in gear and I was setting at a stop sign at a Tee intersection with the wheels turned to the left. I did not see him coming and the attack caught me off guard. I pressed charges which were dismissed and then he retired earlier. I thought this was the end of the harassment.

This is the time my cattle started getting sick. The following year our barn was burnt down and life felt very chaotic. A few years later a neighbor shot a pair of deer early in the fall on what I believed to be deprivation tags. The deer showed the exact same signs of our cattle reaction and we had been unable to determine the cause up until this time working with local vets and Iowa state University.

It was at this time that I called the Iowa DNR director's office in Des Moines. I explained my situation and, in a few days, DNR officer Eric Johnston showed up at my parents' residence. He told my father and myself to shoot a affected animal and call him right away that he and another individual would be on standby to take the animal to a lab and have it analyzed to determine what was wrong. His instructions were by any means necessary. After weeks of hunting for an affected animal I was pulled on night by the same officers that I previously dealt

with. Eric Johnston and Greg Woodley were two that I remember at this time. When I explained he said that it was only for that weekend which was a detail he left out. When I went to court, I explained to the judge my situation and when I subpoenaed the persons from Des Moines that could exonerated me and collaborate my testimony the subpoenas were squashed and I was found guilty as when questioned under oath Eric Johnston lied and I could not prove my case without the witnesses. I lost my gun and my hunting rights. I was performing a public service in the name of public safety. The DNR had time to stalk me, but no time to help me. This was during the beginning stages of our complaints into the ADW's and it has felt that the harassment has continued. The issues with the wardens continued for years to come. My problems with the lowa DNR have affected every aspect of my life. I am getting DNR internal emails to validate all of these accusations. I hope this helps paint the context that DNR has operated under. I think it explains why DNR has been so hesitant to agree about anything that would benefit me.

I hope these documents bring clarity to the complicated situation that has transpired. If there is any doubt as to facts asserted here in please reach out as I have hundreds more DNR emails as well as thousands of pictures to show these outlets are ADW's and need closed.